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ABSTRACT

Evaluation activities conducted by the Hawaii State Department of Education in the Honolulu School District are described. These activities met all the requirements of the Title I Evaluation and Reporting System (TIERS). The Comprehensive Language Improvement Program (CLIP) was implemented to assist disadvantaged children. CLIP had four components (language improvement centers, curriculum, instruction, and parent involvement) which were integrated into a comprehensive program. The improvement-oriented evaluation strategy was outlined and discussed. Key elements in the improvement-oriented evaluation strategy included evaluation focus, formulation of evaluation questions, selection of evaluators, planning and designing the evaluation, and implementation. The CLIP instructional strategies study was designed to promote the use of evaluation information in the district. A quality monitoring process enabled district staff to use evaluation data in working with school level staff to effect positive changes in program implementation.
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IMPROVEMENT-ORIENTED EVALUATION: AN LEA EXAMPLE

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A paper presented at the annual meeting of the
American Educational Research Association
New Orleans, April 23-27, 1984

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IMPROVEMENT-ORIENTED EVALUATION: AN LEA EXAMPLE

INTRODUCTION

Much criticism has been leveled against the Title I Evaluation and Reporting System (TIERS) because of its restricted scope and limited potential for use in program implementation and improvement (Barnes and Ginsburg, 1979; David, 1981; vanderPloeg, 1982; Holley, 1980). While this criticism is generally justified, it has never been the intention of the U.S. Education Department to restrict Title I (now Chapter 1) evaluation to the gathering of summative information aggregatable up to the federal level. Indeed, project staff are urged to complement TIERS by implementing additional evaluation activities to address local concerns (Wisler and Anderson, 1979). Sustained effects evaluation was subsequently promulgated to require local districts to conduct evaluations addressing local questions.

In spite of these efforts to expand Title I/Chapter 1 evaluations and to make them more useful at the local level, small- and medium-sized school districts have tended to confine their evaluation activities to meeting TIERS requirements. Several factors have contributed to this state of affairs. Among them are: (a) federal urgings are often seen as an encroachment of local prerogatives and are responded to with a minimum level of effort on the part of local districts; (b) most staff at a small- or medium-sized district have relatively little time to attend to evaluation activities because of other numerous responsibilities; and (c) budget cuts have made it necessary to curtail project activities including program evaluation.

These obstacles are, of course, not insurmountable. This paper describes evaluation activities conducted by a medium-sized district which not only met all requirements under TIERS but also produced information of high use potential. Furthermore, the results appeared to be of relevance to Chapter 1 projects implemented in other locations.

PROGRAM CONTEXT

The Hawaii State Department of Education is the only centralized, single state system in the nation. The state is called the "melting pot of the Pacific", its population being made up of people with varied ethnic, cultural and linguistic backgrounds. The Department of Education serves over 200,000 students across the state. A large percentage of this number are either immigrants or second-generation children of non-English speaking parents.

The Honolulu District is the largest of seven school districts in Hawaii. It serves a total of 55 public schools (40 elementary, nine intermediate and six secondary schools), five special schools (e.g., the Hawaii School for the Deaf and Blind), 51 community schools for adults, 55 private regular schools, six schools for special education, and 24 private trade, vocational or technical schools. The District serves a total of over 35,000 students every year. The Compensatory Education Section serves eligible disadvantaged students from both public and private schools.

Since the implementation of the Comprehensive Language Improvement Program (CLIP) in 1979, over 10,000 disadvantaged children have been

served in the district. These students were enrolled in some 24 public schools and 12 private affiliate schools covering grades two through twelve.

The project schools were selected for having high concentrations of children from low income families. Students attending these schools came mainly from families receiving welfare assistance, living in public housing projects and/or high-density neighborhoods with a high concentration of immigrant or itinerant families.

The students in the Chapter 1 program were selected on the basis of their test scores on the MAT reading comprehension test or the SAT reading test. The average cutoff score has been the 25th percentile or lower in some instances because of budgetary constraints.

The CLIP has four major components: language improvement centers, curriculum instruction, and parent involvement. These components are integrated into a comprehensive program, implemented and monitored by a highly-trained staff.

Language Improvement Centers

All Chapter 1 activities are carried out in language improvement centers. These centers are located in project schools but are significantly different from a regular classroom in a number of ways. First, each center is staffed by a project teacher, one or more part-time teachers, one or more educational assistants, and a parent tutor. Secondly, the centers are structured in such a way that it is possible for several tutors to work with individual students or small groups of students simultaneously. Thirdly, a wide variety of preselected learning

materials are provided in the centers for use by individual students. The centers are set up to conform with the basic philosophy and principles of psycholinguistics.

Curriculum

The curriculum implemented in the CLIP is based on the principles of psycholinguistics. The emphasis is on whole and natural language development. The whole language approach encourages the integration of all the language arts and concentrates on larger units, i.e., larger than words or letters. Students are provided with many types of materials for abundant reading opportunities and resources emphasizing total language approaches, e.g., assisted reading, uninterrupted sustained silent reading, and language experience methods. Additional curricular resources include materials which promote experimentation and problem-solving by students. Standard audio-visual equipment and hardware are made available to support the curricular emphasis. These include tape recorders, language masters, record players, cameras, typewriters, and filmstrip projectors.

A curriculum plan is prepared by the Chapter 1 project teacher for each program participant in consultation with the classroom/English teacher. The curriculum plan is based on the results of diagnosis and is designed around a cluster of specific learner objectives. It focuses on total language instead of isolated or fragmented reading skills and emphasizes a comprehension-centered language improvement approach. The diagnostic procedures include reading miscue analysis and the use of the Woodcock Reading Test and the MAT Reading Instructional Tests. The

individual curriculum plan is periodically evaluated and changes are made as needed.

Instruction

Instructional activities in the language improvement centers focus mainly on individual student needs. Instruction is guided by a set of performance objectives and clusters of instructional strategies. There is a strong interrelationship between the various performance objectives, instructional strategies and educational materials utilized. Low pupil-teacher ratio is maintained at all times through efficient scheduling and planning of activities. Inservice training of project teachers covers diagnostic procedures, the use of recommended instructional strategies as well as principles of psycholinguistics. Workshop topics include components of a comprehension-centered reading program, language variations, and language-based problem-solving.

Parent Involvement

A unique and significant component of the CLIP is parent involvement. A district parent involvement assistant is responsible for coordinating and monitoring parent involvement efforts. A School Parent Advisory Committee (SPAC) is formed in each of the project schools to get parents involved in Chapter 1 projects. The SPACs also sponsor workshops in parenting skills and in helping Chapter 1 students read at home. A District Parent Advisory Council (DPAC) is established to coordinate and plan districtwide parent involvement activities. Its main purpose is to provide parents the opportunity to become involved in program improvement

and other activities that they deem helpful and important in meeting the needs of the Chapter 1 students. The DPAC, whose membership consists of representatives from the various Chapter 1 school projects, acts as a liaison between parents and their respective schools and helps promote better school-home relationships.

Specific program objectives of the CLIP include the following:

1. The average normal-curve-equivalent (NCE) gain scores of CLIP students as measured by the Metropolitan Achievement Tests will be significantly higher than the no-treatment expectation.
2. There will be an upward trend in the average NCE gain scores of CLIP students over the years.
3. A majority of the CLIP students will make positive NCE gains.
4. There will be an upward trend in the percentage of CLIP students making positive NCE gains.

EVALUATION STRATEGY

A sequence of key events led to the implementation of the improvement-oriented evaluation, including:

Evaluation focus. After having implemented TIERS for several years the CLIP project staff generally shared the perception that TIERS information alone was not sufficient for program implementation and improvement purposes. The evaluation focus needed to be broadened to include specific questions relating to staff concerns.

Formulation of evaluation questions. Several questions were subsequently formulated by the project staff to be addressed in the improvement-oriented evaluation:

- (a) What are the effects of the CLIP on student achievement on a short-term (annual) basis?
- (b) What parent activities, if any, contribute to student achievement?
- (c) How severe are the summer drop-off effects, if any, on student achievement?
- (d) Do long-term (multi-year) project participants continue to benefit from the program?
- (e) What instructional strategies are related to or produce high achievement?

Selection of evaluators. The district recognized that addressing these evaluation questions required more staff resources and expertise currently available within the district. An external evaluator was subsequently identified to design and implement the necessary evaluation tasks. A district staff was assigned half-time to provide assistance and to coordinate the evaluation activities.

Planning and designing the evaluation. A multi-year, improvement-oriented approach was used in the evaluation. While Model A1 was used to collect achievement information, other data gathering strategies were developed to collect the pertinent data.

Evaluation implementation. Various data gathering instruments were developed by the external evaluator. Most of the data collection tasks were carried out by project or district staff under the supervision of the external evaluator. Extensive use was made of Chapter 1 TAC services in completing the various evaluation tasks.

Three major types of evaluation activity were conducted during the 1979-82 school years. These included the annual external evaluations, the sustained effects evaluation and the longitudinal data base study. These activities were an integral part of the CLIP and served both a formative (for improvement) and a summative (for accountability) function (Nevo, 1983).

EVALUATION STUDIES AND RESULTS

Program Impact

For each of the three school years in 1979-82 an annual evaluation of impact was conducted on the CLIP by the external evaluator. The SMS Research Corporation, a Honolulu based firm, used a prescribed set of procedures to conduct the evaluations. The procedures, approved and promulgated by the U.S. Department of Education, are fully described by Tallmadge et al. (1981). The following is a brief description of the rationale and essential elements of the process used in the annual evaluations.

Procedure. Three "models" are included in the TIERS for the conduct of Chapter 1 evaluation. The models provide an observed measure of performance at the end of the project and an estimate of what that performance would have been without the project. The estimate of how well students would have performed without the project is called the no-treatment expectation. The difference between the observed post-project performance and the no-treatment expectation is taken as a measure of project impact. In other words, the models answer the question: How did the project change student achievement scores from what they would have been without the project?

$$\text{Project Impact} = \left\{ \begin{array}{c} \text{Observed} \\ \text{Post-Project} \\ \text{Performance} \end{array} \right\} - \left\{ \begin{array}{c} \text{No-treatment} \\ \text{Expectation} \end{array} \right\}$$

Gains resulting from Chapter 1 projects are reported in normal curve equivalents (NCEs). The NCE scale is tied to the distribution of test scores of a nationally representative sample of students and matches the percentile ranks of that distribution at values of 1, 50, and 99. When nationally normed tests are used, NCEs can be derived directly from the percentile rank corresponding to each possible test score.

Of the three TIERS models, the most widely used is the norm-referenced model or Model A (Stonehill and Anderson, 1982). The Honolulu District adopted the model in 1977 and has since been using it to evaluate all Chapter 1 projects in the district. In Model A, normative data are used to substitute for data from a comparison group.

The no-treatment expectation is derived under the assumption that students will maintain their status with respect to the norm group from pretest to posttest (Wood, 1980). In other words, it is assumed that students who scored at the 20th percentile on the pretest would also score at the 20th percentile on the posttest unless they participate in some special instructional activities. If they participated in such an intervention and it had a positive effect, the project students would achieve a higher percentile status on the posttest than they did on the pretest. For the norm-referenced model, project impact is defined as shown below. The first term in the equation corresponds to the "observed post-project performance" and the second term, to the "no-treatment expectation."

$$\text{Project Impact} = \left\{ \begin{array}{c} \text{Project} \\ \text{Group} \\ \text{Posttest} \\ \text{Status} \end{array} \right\} - \left\{ \begin{array}{c} \text{Project} \\ \text{Group} \\ \text{Pretest} \\ \text{Status} \end{array} \right\}$$

It should be emphasized that Model A does not compare the achievement gains of Chapter 1 students with the gains of "average" students. Instead, the gains of project students are compared against the gains expected of norm-group students who scored at the same percentile level on the pretest.

Obviously, the validity of Model A hinges on the similarity of project students to students in the norm group with whom they are compared. Thus it is essential that all comparisons be made with normative data compiled from students at the same age or grade level as

the project students. For example, if a fall-to-spring evaluation is conducted on a Chapter 1 project serving fifth-grade students, pretest status is determined by beginning-of-fifth-grade norms and posttest status is determined by end-of-fifth-grade norms.

Testing. A proper implementation of Model A requires that all testing be accomplished at, or near, the midpoint of the time interval during which the national norm group was actually tested. For all three school years included in the study, the Metropolitan Achievement Test, 1978 was used to pretest and posttest all CLIP students in the district. The reading comprehension score was chosen as a measure of program impact.

Functional level testing was used to ensure that the test level would not be too easy or too difficult for the project students. In general, students were tested one level below their grade. Students were tested by project staff in October (pretest) and in April (posttest). Except for a few isolated cases, a majority of the project students were pre- and posttested. There was no reason to suspect that the small number of students not pre- and posttested presented a potential bias in the results.

Results. For each of the three school years, achievement gains were calculated for each grade level and in clusters of grade levels (i.e., elementary and secondary). These are presented in Tables 1 through 3. Overall, NCE gains ranged from 5.1 to 6.0. Consistent with the national trend (Stonehill and Anderson, 1982) the elementary grades made higher gains than the secondary grades. This is perhaps more a result of the developmental process than a consequence of differential effectiveness of the program.

Table 1

Chapter 1 Reading Achievement Data
Honolulu District (1979-80)

Grade Level	Students Tested	<u>Average NCE Scores</u>			Percent of Students Who Gained
		Pre Test	Post Test	Gain	
2	417	22.3	26.2	3.9	55
3	306	14.9	31.5	16.6	86
4	329	25.0	32.4	7.4	77
5	333	22.8	29.4	6.4	73
6	224	21.7	31.3	9.6	88
7	466	27.9	31.3	3.4	61
8	451	26.6	29.9	3.3	59
9	431	23.7	25.1	1.4	51
10	275	15.2	18.6	3.4	54
11	268	14.6	15.8	1.2	43
12	192	9.4	12.8	3.4	53
TOTAL	3,692	21.6	26.7	5.1	63

Note: No standard deviations were obtained for each grade for the 1979-80 data.

Table 2

Chapter 1 Reading Achievement Data
Honolulu District (1980-81)

Grade Level	Students Tested	Average NCE Scores			Std. Dev.	Percent of Students Who Gained
		Pre Test	Post Test	Gain		
2	270	17.1	28.0	10.9	18.6	67
3	318	18.5	33.1	15.6	12.8	84
4	310	26.6	33.7	7.1	10.2	75
5	328	26.1	30.4	4.3	8.9	65
6	323	26.4	33.5	7.1	7.7	81
7	349	27.6	31.2	3.6	10.0	63
8	450	26.4	29.0	2.6	9.5	56
9	459	23.5	26.2	2.7	10.2	55
10	317	18.4	22.6	4.2	9.7	62
11	292	19.0	21.7	2.7	11.6	48
12	192	14.5	19.4	4.9	11.5	52
TOTAL	3,610	22.7	28.4	5.7	4.7	64

Std. Dev. = Standard deviations of gains scores.

Table 3
Chapter 1 Reading Achievement Data
Honolulu District (1981-82)

Grade Level	Students Tested	Average NCE Scores			Std. Dev.	Percent of Students Who Gained
		Pre Test	Post Test	Gain		
3	251	20.6	36.2	15.6	12.8	87
4	216	24.2	31.4	7.2	10.4	72
5	282	25.5	32.3	6.8	9.7	74
6	238	25.6	34.1	8.5	7.7	87
7	366	27.9	33.0	5.1	8.6	71
8	406	26.2	29.3	3.1	8.9	58
9	396	23.7	25.7	2.0	10.2	49
10	154	17.6	24.7	7.1	10.1	69
11	89	16.6	20.0	3.4	7.5	53
12	98	13.3	16.8	3.5	9.6	57
TOTAL	2,496	23.8	29.8	6.0	10.4	68

Std. Dev. = Standard deviations of gain scores.

Table 4

Longitudinal Analysis of Chapter 1 Reading Achievement Gains
Honolulu District (1979-82)

Projects	School Year	Number Students Tested	NCE Gain		Percent of Students with Positive Gain Scores
			Mean	SD	
Elementary School Projects	1979-80	1,637	8.3	12.7	87
	1980-81	1,552	8.9	12.6	75
	1981-82	956	9.6	10.6	80
Secondary School Projects	1979-80	2,055	2.7	10.1	54
	1980-81	2,067	3.2	10.3	56
	1981-82	1,465	3.6	9.3	60

Note. All NCE gains were statistically significant at the .01 level.

The percent of project students making positive NCE gains provides a separate measure of project impact. The data showed that in most instances a predominant majority of the project students made positive NCE gains.

Table 4 presents a longitudinal perspective of achievement results from 1979 to 1982. The data are presented for elementary and secondary projects separately. The information includes number of students pretested and posttested, average NCE gain scores, standard deviations of average gain scores, and the percentage of students making achievement gains.

At the elementary level, both the average gain and the percentage of students making gains increased consistently over the three years. A similar trend was observed for the secondary schools. These achievement patterns are particularly significant in that they suggest cumulative impact of the CLIP on student achievement.

Parent Involvement

The involvement of parents of CLIP students in program activities is an integral element of program design. In Hawaii, parent involvement has long been an essential component of Chapter 1 operations. In Honolulu district, parent involvement differs from similar efforts in other districts in that its delivery and coordination of parent training is closely articulated with the psycholinguistic classroom strategies. The parent involvement study, conducted in the 1980-81 school year, dealt with the effects of parent training on student achievement. The following discussion focuses on parent behaviors which have been found to be related to student achievement gains.

As shown in Table 5, students whose parents helped them with their homework made greater NCE gains than those whose parents did not provide such help. Similar differences were found between students whose parents encouraged them to read and those who received no encouragement from their parents. For items more central to parent behaviors fostered by the CLIP (e.g., visiting the library, asking Chapter 1 teachers for assistance, setting a family reading hour), differences in gain scores, while not dramatic, were always in the expected direction. Parents who reported these behaviors had children who tended to make higher gains.

Chapter 1 makes the implicit assumption that a combination of remedial instruction at school and full parental involvement in the educational process would raise the achievement level of disadvantaged students. While there was ample evidence to demonstrate the impact of supplemental instruction, the present study provided the first indication in Hawaii that appropriate parent involvement is associated with increased reading achievement.

Table 5
Parent Involvement and Student Reading Achievement
Honolulu School District (1980-81)

Survey Items and Parent Responses	Responses	
	No.	Gain
<u>Do you do any of the following things for your child?</u>		
Encourage your child to read (Y)	143	6.7
(N)	8	3.1
Help your child with homework (Y)	137	6.9
(N)	15	3.2
Have discussions about materials child (Y)	127	7.2
has read (N)	23	3.2
Listen to your child read (Y)	127	6.8
(N)	26	5.2
Set a specific time and provide a quiet (Y)	104	6.1
place for your child to study each day . . (N)	44	7.0
Visit the library (Y)	79	6.7
(N)	71	6.2
Ask the Title I teacher how you can (Y)	77	6.9
help your child in reading (N)	69	5.8
Set a specific time for the whole family (Y)	45	7.2
to read (N)	104	6.4
Teach child how to follow directions . . . (Y)	122	5.5
(N)	27	10.6
Talk about TV programs you watch (Y)	134	7.0
together (N)	16	2.7
Discuss current events with your child . . (Y)	120	6.0
(N)	29	9.7
Take child on outings as a learning (Y)	94	9.0
experience (N)	9	4.0
Total Parents Responding	153	6.5

Y = Yes

N = No

No = Number of parents responding Yes or No.

Gain = NCE gains of students whose parents responded Yes or No to the survey items.

Summer Drop-Off

Over the past decade, evaluation results indicated that Chapter 1 activities have been effective in raising the achievement level of participating students. Some researchers (e.g., David and Pelavin, 1976) pointed out, however, that the achievement gains were not sustained over the summer months. They suggested that large achievement gains produced during the school year were offset by comparable losses during the summer. The new Chapter 1 legislation addresses the issue of sustained effects by requiring the evaluation of educational achievement over a twelve-month (or longer) period. This is to determine whether gains made during the regular school year are sustained over the summer.

A sustained effects evaluation was conducted in the Honolulu district during the 1981-82 school year. Data were obtained from files containing student pretest and posttest scores from the 1980-82 CLIP program evaluations. Files were matched on a student-by-student basis across the school district. This made it possible to include in the analysis students who were in the program for two consecutive years, but at different schools.

Districtwide results of the sustained effects analysis for students enrolled in the CLIP during the 1980-81 and 1981-82 school years are presented in Table 6. Summer effects between spring of 1981 and fall of the same year were negative. It was evident that CLIP students did experience some reading achievement loss during the summer. The negative summer effects were statistically significant at the .05 level. On the other hand, the 12-month gains of the students were positive and also statistically significant at the .05 level. It thus appeared that while summer regression did exist, the loss was not of sufficient size to

offset the 9-month gains. The last column in Table 6 shows the 1981-82 gain scores for students who were also enrolled in the 1980-81 program. The data suggest that the 9-month gains of returning students exceeded their gains in 1980-81.

Table 6
Sustained Effects Achievement Data
Honolulu District (1981-82)

N ¹	NCE Test Scores				NCE Achievement Gain			
	Fall 1980	Spring 1981	Fall 1981	Spring 1982	Fall to Spring 1980-81	Fall to Fall 1980-81	1981 Summer Effect	Fall to Spring 1981-82
1,301	21.5	26.2	25.0	30.2	4.7	3.5	-1.2	5.2

¹Number of students with all required test scores. Includes only those students who were enrolled in the CLIP in both 1980-81 and 1981-82 school years.

Longitudinal Effects

The Honolulu district conducted a longitudinal study to track CLIP students for school years 1979 through 1982. The study was prompted by a general concern over the effects of long-term participation in the program. It has been suggested that long-term participants form a core group of disadvantaged youngsters who for one reason or another do not benefit from the program. In implementing the study, a data file was created to contain scores of students who had been in the program for three years. Some 684 such students were identified in the district.

As depicted in Figure 1, the three-year participants entered the CLIP in 1979 with an average pretest score of 19.5 NCEs. In the first year, they gained 4.9 NCEs followed by a summer loss of 2.0 NCE points. A second year of remedial instruction, however, produced an additional gain of 4.4 NCEs, again, followed by a loss of 1.6 NCEs in the summer. For the 1981-82 school year, these students gained an additional 4.5 NCEs, making an overall gain of 10.2 NCEs.

The hypothesis that these students represent a residual group who do not benefit from program services is not supported by the data. Instead, the 684 students (about 19 percent of the 1979-80 CLIP population in Honolulu) consistently made achievement gains, even though their gains may not be as high as those made by other CLIP participants.

Instructional Strategies

Much has been said about the conduct of evaluations which result in little or no use of evaluation information for program planning and improvement (Wise, 1978; Thompson and King, 1981). Most state departments of education and local school districts have more evaluation information at their disposal than they could meaningfully examine and use in making program decisions. On the other hand, most evaluations are performed in a fashion that is not conducive to evaluation use. They are often narrow in scope, having been designed to meet specific federal or state requirements. As a result, little or no relevant information is provided in a timely fashion for making program decisions. The CLIP instructional strategies study represents a conscious effort on the part of the project staff to promote evaluation use in the district.

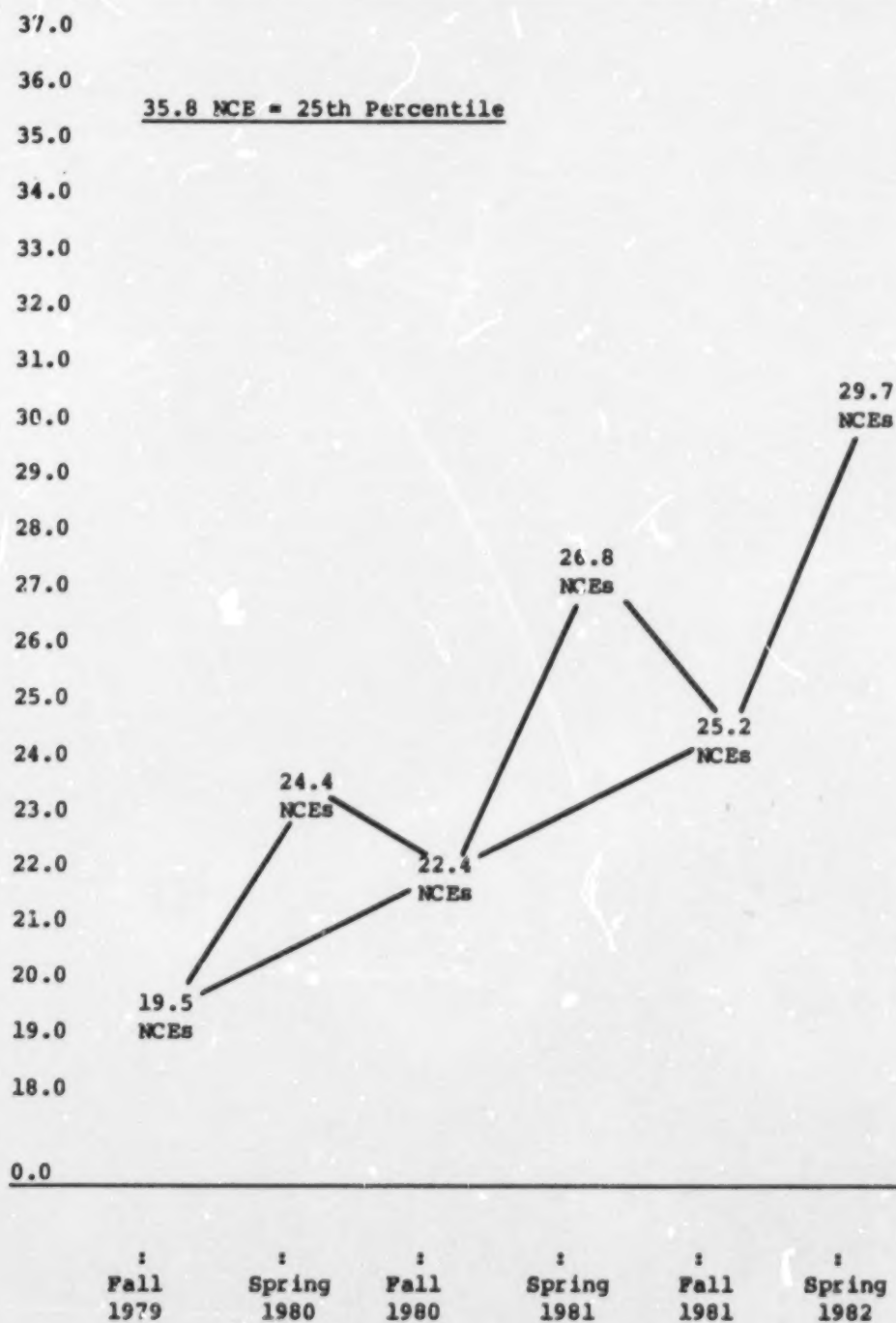


Figure 1: Reading Achievement of Students
Enrolled in the CLIP During School Years 1979-82 (N=684)

Exploratory discussions on the study began in late 1978. These discussions stemmed from project staff's concern over the availability of a great amount of data kept in the district files and the lack of use of these data for planning and improving Chapter 1 activities in the project schools. A series of consultations were held between TAC and project staff during the latter part of 1978 and early 1979. By June 1979, variables of interest were identified and specifications for coding the variables were developed.

The instructional strategies study was conducted in early 1980 on data obtained during the 1978-79 school year. The study included four schools (Jefferson, Central, Kaiulani and Puuhale) with a total of 383 students in grades 2-9. Student achievement was measured by the Woodcock Reading Mastery Test (1973). The data on identified variables were gathered from district data files maintained for Chapter 1 evaluation purposes. Data coding was performed by the Honolulu district staff. Completed data sheets were forwarded to the TAC for key-punching and analysis. Descriptive and inferential statistics were obtained from the data to illustrate the range of topics or evaluation questions which might be addressed by the data. For example, correlations between instructional strategies and student achievement gains were obtained.

Several instructional strategies were found to be related to student outcomes. These strategies included: read aloud/read along, assisted reading techniques, reference skills, questioning strategies, extended use of teacher/pupil made materials, book reports, language-thinking approaches, selected games/activities for manipulating language, and reading strategy lessons.

Table 7

Correlations Between Instructional Strategies and
Achievement Gains in Passage Comprehension
(1978-79 School Year)

Strategies	Grade Levels							
	Second (N=66)	Third (N=47)	Fourth (N=33)	Fifth (N=37)	Sixth (N=53)	Seventh (N=43)	Eighth (N=40)	Ninth (N=37)
1. Read aloud/ Read along		.39			.28			
2. Assisted Reading Techniques					.36			
3. Uninterrupted Sustained Silent Reading								
4. Entire Range of Reading Materials					.37			
5. Math. Science Social Studies, Literature							.32	
6. Dictionary, Library Other Reference Skills							.32	
7. Pars. Manzo's Technique, etc.		.50						
8. Questioning Strategies		.35						
9. Dialogue/ Discussion								
10. Written Conversation								
11. Extended Use of teacher/ Pupil-Made Materials		.47		.47	.36			
12. Book Reports					.42			

Table 7 (Continued)

Strategies	Grade Levels							
	Second (N=66)	Third (N=47)	Fourth (N=33)	Fifth (N=37)	Sixth (N=43)	Seventh (N=43)	Eighth (N=40)	Ninth (N=37)
13. Constructions/ Products		.31						
14. Reading Records								
15. Language- Thinking Approaches		.41		.49	.38			
16. Written Conversation (Watson)								
17. Materials That Present Distinctive Language Patterns								
18. Materials Involving Listening/ Writing or Combination of Both; Storytelling, Reading Aloud, etc.								
19. Sequenced Combinations of Visual, Audio and Reading Materials; Thematic Units and Projects			.30					
20. Selected Games/ Activities for Manipulating Language					.31			

Table 7 (Continued)

Strategies	Grade Levels							
	Second (N=66)	Third (N=47)	Fourth (N=33)	Fifth (N=37)	Sixth (N=53)	Seventh (N=43)	Eighth (N=40)	Ninth (N=37)
21. RMI, Short- Form								
22. Informal Applications		.50			.31			
23. Reading Strategy Lessons		.50						

Note: Only significant ($p < .05$) correlations are reported.
Correlations were not computed for strategies used by all or none of the students.

QUALITY MONITORING

The Process

Quality monitoring is a participatory and collaborative effort to bring about positive changes in project schools. It is a systematic process of examining project implementation variables and evaluation results and translating them into action plans to improve student achievement. A dynamic process, quality monitoring promotes school level use of evaluation data for program improvement, leads to an on-going identification and analysis of variables affecting student achievement and ensures fidelity of program implementation. An important consequence of quality monitoring is the continuous exploration for better ways of providing instruction to Chapter 1 participants. The identification and analysis of important variables provide a sound basis for examining the organization, structure and effectiveness of the CLIP.

Quality monitoring begins at the district level with the district staff assuming the following responsibilities:

- Examination of achievement gains for each project school in comparison to previous years, to district averages, and to grade level averages. Significant patterns are noted.
- Examination and analysis of project implementation variables.
- Preparation of project personnel/administrator for the initial quality monitoring meeting by providing a list of topics to be discussed.

- Coordination of meetings with school project staff and administrators to identify variables/practices in the areas of administration, program implementation, monitoring, testing and evaluation, curriculum and inservice, and parent involvement.

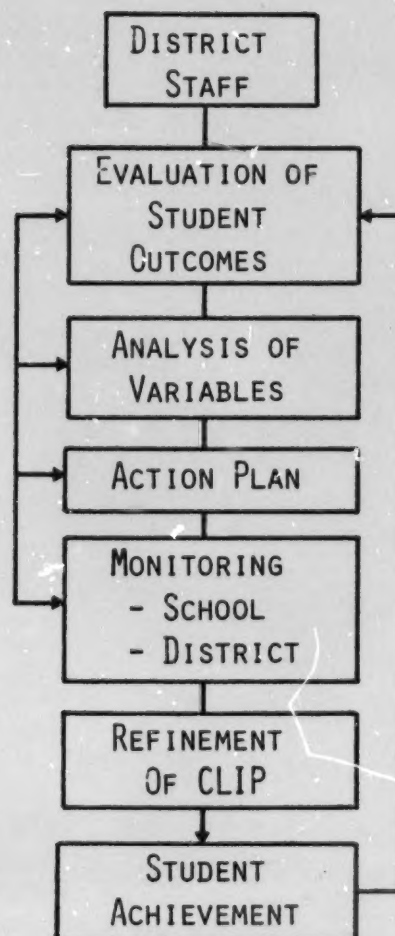
As program implementation and outcome variables are reviewed, questions such as the following are raised:

1. Does the staffing configuration produce a classroom environment conducive to maximal language learning?
2. Is the instructional delivery system meeting the needs of project participants?
3. Is the per pupil cost noticeably higher or lower than others? Why?
4. Are the evaluation procedures appropriate for the Chapter 1 population?
5. Are the evaluation results significantly better or worse than those of previous years?
6. Do the evaluation results indicate significant patterns this year, from year to year, and/or over the years?
7. What are the strong and weak areas in the test performance of project participants?
8. Are project staff using appropriate instructional strategies and materials?
9. What are the inservice needs of project staff?
10. Are parent involvement activities helping parents to help their children at home?

Then in a collaborative, problem solving mode, district and school level project personnel and administrators develop a plan of action and identify persons responsible for carrying out the plan. Decision making and responsibility are shared by all individuals involved in the project.

The following chart describes the quality monitoring process:

QUALITY MONITORING PROCESS



Since the quality monitoring process was first implemented in 1980, project schools selected to participate in quality monitoring have met with much success in using evaluation results for program improvement. Achievement gains have invariably resulted from the total commitment of the project personnel to this objective. In addition, several other positive outcomes were noted when the participating schools began the second year of quality monitoring:

1. The district's role in examining evaluation results diminished as school project personnel began to analyze evaluation results themselves.
2. Project personnel began to participate in program improvement plans with a positive attitude focusing on solutions rather than problems.
3. A self monitoring attitude prevailed. School project personnel were better able to identify problem areas. This was evident in quality monitoring sessions where school project personnel had determined the priorities for the year and had identified problem areas to be discussed.

Thus, the quality monitoring process has encouraged problem solving in an objective and systematic manner. With this new perception, positive changes have continued to occur in the participating schools.

An Example

During the 1982-83 school year, quality monitoring was implemented at Dole Intermediate School. The third largest intermediate school in the district, Dole had an enrollment of 1,096 in grades seven through nine.

Ethnic backgrounds of the student population included Filipino (45 percent), Samoan (24 percent), part Hawaiian (12 percent) and Japanese (5 percent). Forty-three percent of the students were in the free/reduced lunch program.

The Chapter 1 project served some 400 youngsters in grades seven through nine. The project employed 15 staff members including 5 teachers, 6 part-time temporary teachers, 3 educational assistants and 1 para-professional tutor. Total project funding in 1982-83 was \$253,793 with a per pupil cost of approximately \$634.

In examining the evaluation results for the 1980-81 and 1981-82 school years, district staff noted that Dole Intermediate School's Chapter 1 classes in grades eight and nine had not made the anticipated gains. The ninth graders in particular showed negative NCE gains for both school years. The decreasing gains prompted the selection of the school for quality monitoring. Major events which occurred during the process are described as follows:

Quality monitoring meeting. A standard initial school visit form was sent to the school project administrator and staff prior to the scheduled meeting. The initial school visit occurred at the beginning of the new school year in October. During the quality monitoring meeting, attention focused on the poor achievement of the Chapter 1 participants in grades eight and nine. Variables thought to have some impact upon the low achievement trend were identified. Accordingly, the quality monitoring group developed an action plan to effect change, identified persons responsible for various tasks, and set up timelines for carrying out the plan. Specifically, it was agreed that the grouping assignments in grades eight and nine did not permit small group instruction or other

optimum instructional arrangements. The plan of action was to reassign a Chapter 1 project teacher from grade seven to grade eight. Project students were reassigned so that the larger Chapter 1 classes were reorganized into smaller classes. The school administrator, the district resource teacher, the school registrar and the project teacher coordinator were all responsible for the reorganization which took place shortly after the quality monitoring meeting.

Implementation of action plan. Immediately following the initial quality monitoring meeting, the district resource teacher met with the project staff to review the plan of action and to work out further details. Three specific areas needing attention were identified to be delivery of services, staffing and curriculum. A detailed plan of action to effect changes in these areas is presented in Table 8.

Table 8

Program Improvement Plan for Dole Intermediate School
1982-83 School Year

	Delivery of Services	Staffing	Curriculum
	GRADES 8 & 9	SCHEDULES	TESTING
PROBLEM	- Mostly large group instruction - Students assigned to Chapter 1 classes by grade levels, not needs. Some classes overloaded	- PTTs assigned to teachers and utilized as aides rather than tutors. School has rotating schedule. PTTs' schedules do not correspond to pupils' schedules	- Lack of test taking skills - Poor attitude toward test taking - Over testing with MAT GROUPING - Shift from large group instruction to small group requires curricular modifications
ACTION	- Reassign Chapter 1 project teacher in grade 7 to grade 8 - Make lateral transfers from large Chapter 1 classes to smaller classes	- Identify PTT roles and responsibilities through class-room observation/ interview - Meet with project staff/ administrator to report results of observations and interviews - Identify strengths and weaknesses and formulate recommendations	- District to provide "mini tests" for project staff to teach test taking skills - Coordinate with district SLEP - Administer reading diagnostic tests - Review/revise personalized educational plan on student record profile

Table 8 (Continued)

Program Improvement Plan for Dole Intermediate School
1982-83 School Year

	Delivery of Services	Staffing	Curriculum
PERSON RESPONSIBLE	- Administrator, district resource teacher, registrar, project teacher	- District resource teacher, project staff, administrator	- Project staff, district staff project teachers, district resource teacher
TIMELINE	- As soon as possible by pretest date	- As soon as possible - Upon completion of observations	- All Year - Pre-post testing periods - All year
RESULTS	- More equitable class size	- Meeting held - PTTs assigned to specific students - Coordinated effort evident in planning - Successful practices of project shared with entire project staff	- Project teachers reported students appeared more confident and motivated during posttesting - SLEP used Chapter 1 reading test scores - Project teacher more aware of wide range of needs - Pupils functioned at own levels

As other concerns/problems arose during the project years, new plans were developed. Some of the changes occurred immediately and others were made later during project year. Outcomes reported by school project staff were reviewed by district staff at the beginning of the following school year as a new quality monitoring cycle began.

The quality monitoring process required total involvement of all project personnel. On an on-going basis, the project staff shared information, insights and evaluations with the district resource teacher and other colleagues. The involvement of the district resource teacher as a team member provided the opportunity to determine what was really occurring in the classrooms.

Outcomes. Posttests were administered in April 1983. Results obtained by means of the A-1 Norm Referenced Model are shown in Table 9 and Figure 2. Significant gains were made by students in grades eight and nine. The project staff accomplished their goal of raising the reading achievement levels of the eighth and ninth graders at Dole Intermediate School.

Table 9

Chapter 1 Reading Achievement Data
Dole Intermediate School (1981-83)

Grade Level	Students Tested	Average NCE Scores			Percent Of Students Who Gained
		Pre Test	Post Test	Gain	
7	113 (98)	28.7 (31.5)	34.1 (34.8)	5.4 (3.3)	80 (63)
8	106 (117)	27.8 (27.9)	31.0 (35.1)	3.2 (7.2)	59 (78)
9	96 (123)	24.9 (27.5)	23.2 (32.6)	-1.7 (5.1)	36 (73)
TOTAL	315 (338)	27.2 (28.9)	29.7 (34.1)	2.5 (5.2)	60 (72)

Note: Data for the 1982-83 school year are in parentheses.

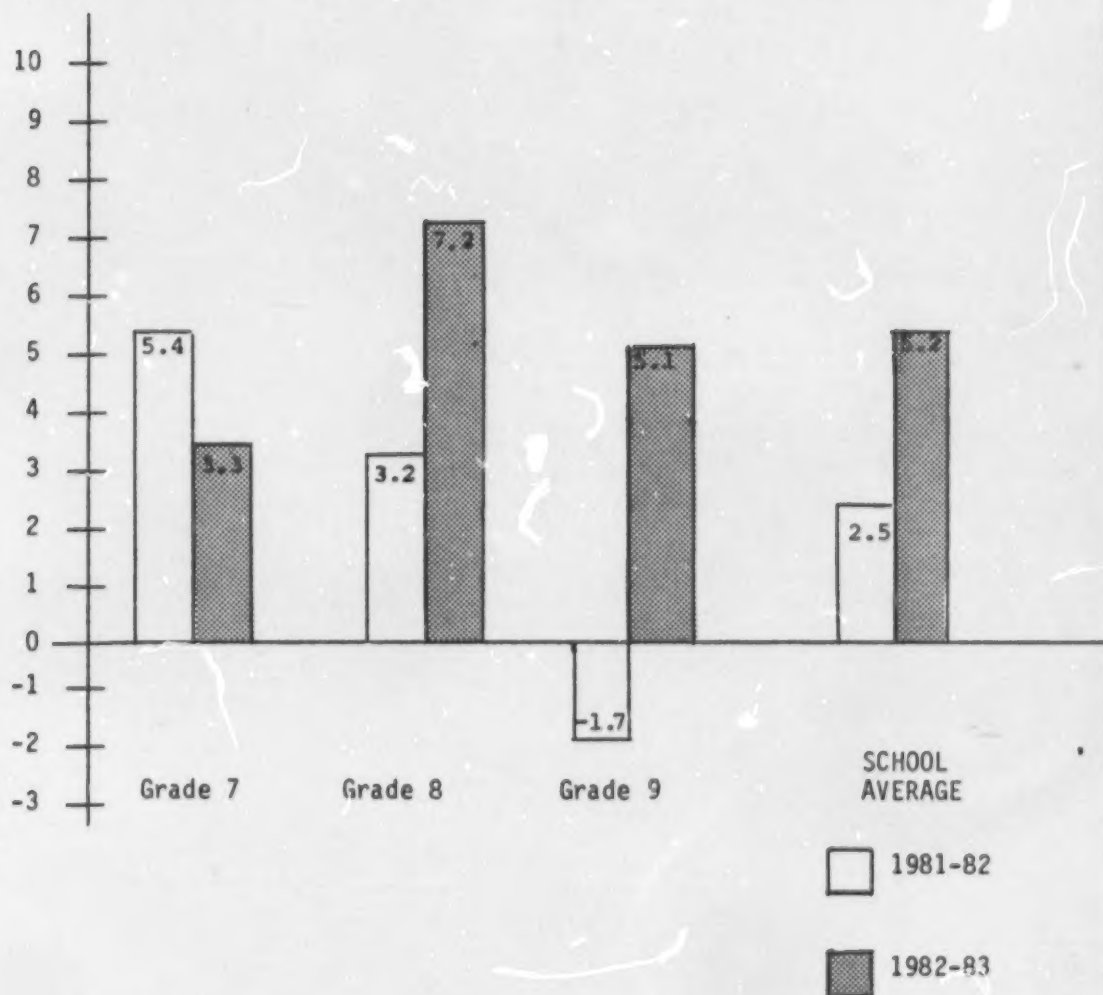


Figure 2: Dole Intermediate School NCE Gains

CONCLUDING REMARKS

In the Honolulu improvement-oriented evaluation the evaluators were able to provide answers to pertinent evaluation questions. For example, for grades 2-12 the short-term effects of the Title I/Chapter 1 projects were indicated by NCE gains ranging from 5.1 to 6.0 for the 1979-82 school years. On a longitudinal basis, cumulative impact was demonstrated for the elementary and secondary projects. Over the three-year period, NCE gains for elementary projects increased from 8.3 to 9.6. Corresponding increases for secondary projects were from 2.7 to 3.6.

A number of parent activities were shown to be related to students' NCE gains. These included:

- Encourage your child to read
- Help your child with homework
- Have discussions about materials child has read
- Listen to your child read
- Set a specific time for the whole family to read
- Talk about TV programs you watch together
- Take child on outings as a learning experience

The summer effect data suggested that there indeed was a summer drop-off. Based on a sample of 1,300 students, the decline was, however, shown to be very slight (-1.2 NCEs). The multi-year project participants were able to continue to benefit from project services from year to year. Over a three-year period (1979-82) they were shown to have made an

overall gain of 10.2 NCEs. The hypothesis that these students represent a residual group who do not benefit from program services is not supported.

Several instructional strategies were found to be related to student outcomes. These strategies included: read aloud/read along, assisted reading techniques, reference skills, questioning strategies, extended use of teacher/pupil made materials, book reports, language-thinking approaches, selected games/activities for manipulating language, and reading strategy lessons.

Results of the studies were presented to teachers, teacher aides, parents and school administrators at the annual Chapter 1 program implementation conferences or through individual consultations with school project staff and principals at the various school sites. To promote a sense of involvement and ownership in the evaluation, project staff were asked to provide evaluation questions which the district should address. On an on-going basis possible responses to the questions along with supporting data were then shared with the staff.

Through a quality monitoring process, district staff were able to use the evaluation data in working with school level staff to effect positive changes in program implementation. Outcomes of these program improvement activities as reflected in NCE gains were quite dramatic in some schools. Moreover, school level staff are gradually building their own capacity for using evaluation information to effect program improvement. A snowballing effect is becoming more and more evident.

Outcomes of the Honolulu effort suggest that given the motivation and sufficient resources, a medium-sized local district could carry out an

improvement-oriented evaluation to complement the implementation of TIERS. Information obtained from such an evaluation effort not only is of high potential for use but also could be of general relevance to other Chapter 1 programs in the state and across the nation. Such evaluations represent a tremendous resource for improving Chapter 1 services to disadvantaged youngsters.

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